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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

March 12, 2003

Mr. James E. Rasmussen, Director  
Environmental Division  
Office of River Protection  
United States Department of Energy  
P.O. Box 450, MSIN: H6-60  
Richland, Washington 99352

**RECEIVED**  
MAR 18 2003  
**EDMC**

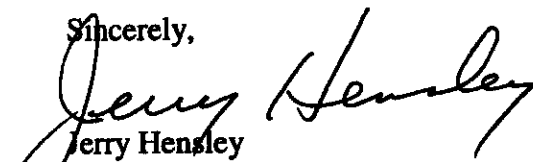
Dear Mr. Rasmussen:

Re: "02-ED-013" HANFORD TANK WASTE TREATMENT AND  
IMMOBILIZATION PLANT (WTP) CONCRETE BATCH PLANT NOTICE OF  
CONSTRUCTION (NOC) AND APPROVAL ORDER REVISION REQUEST

This letter confirms the receipt of your letter "03-ED-033" dated February 25, 2003, providing supplemental information supporting the above referenced letter's request to revise Approval Order DE01NWP-003. Ecology approves the request to revise the approval order as specified in the revision form.

If you have any questions, please contact me at (509) 736-3017.

Sincerely,

  
Jerry Hensley  
Environmental Engineer  
Nuclear Waste Program

Enclosure

JH:nc

cc: See next page

## Hanford Facility Notice of Construction Revision Form

<u>Emissions Unit:</u>  <i>Order No. DE 01NWP-003-REV-0</i>	<u>NOC Application Title and Reference Document:</u>  <i>Waste Treatment and Immobilization Plant Concrete Batch Plant Notice of Construction (24590-WTP-RPT-ENV-02-003)</i>
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**Revision:** *Request to include a diesel fuel oil boiler under the Batch Plant Notice of Construction. The boiler will support concrete production activities during the winter months.*

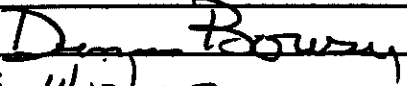
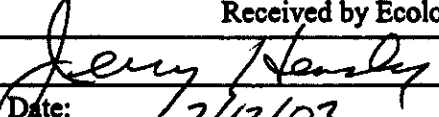
**Discrepancy:**  
  
*The Waste Treatment and Immobilization Plant Concrete Batch Plant NOC presently does not include the operation of a diesel fuel oil boiler. The following revision to the NOC is proposed to allow operation of the boiler throughout the construction phase of the WTP.*

**NOC Application Revision:**

**DESCRIPTION**  
*The following sections of the NOC are proposed for revision to include coverage of the boiler:*

- **Section 4.2.2 Diesel Fuel Oil Boiler**  
  
To support concrete production activities during the winter months, a 4.4 million BTU diesel fuel oil boiler will be operated at the CBP. The boiler will serve to heat water which will be mixed with concrete as a means to control concrete curing rates during the winter months.
- **Section 4.4 BACT for the Diesel Boiler**  
  
The maximum potential emissions from the operation of the boiler was estimated using the appropriate AP-42 emission factors. Operation of the boiler may be necessary for a total time of approximately 2000 hours per year. The total annual operating hours were based on two 10-hour shifts per day for a duration of five months.  
  
The diesel fuel sulfur content will be less than or equal to 0.05 % S, by weight. Emissions from the generator will be limited by the total number of hours operated per year. In addition, good combustion engineering practices will be followed, which include adherence to the boiler manufacturer's specification for operation, maintenance, and combustion control. Specific combustion feed gas ratios (including the fuel-air ratio), monitoring, startup, and shutdown procedures will be followed to maximize combustion efficiency and minimize discharge of pollutants into the atmosphere.
- **Section 5.1.2 Diesel Oil Boiler Emissions**  
  
The emission estimates for the diesel boiler are based on total hours of operation per year, boiler output in million BTU per hour, and emission factors presented in Non-Radioactive Air Emission Notice of Construction Permit Application for the WTP (24590-WTP-ENV-01-009), page C-53  
  
The total annual operating time of 2000 hours were conservatively estimated from two 10-hour shifts per day

for a duration of 5 months. In accordance with WAC 173-460-080(e), the Class A and B air pollutants with established Acceptable Source Impact Levels were compared with the toxic air pollutant calculations. Results of the comparison showed that no Small Quantity Emission Rates will be exceeded. Detailed calculations of both criteria and toxic air pollutant emissions are attached.

Reviewed by ORP:		Received by Ecology:	
			
Date:	11/12/02	Date:	3/12/03

## Hanford Facility Approval Order Request for Revision Form

Emissions Unit:

Order No .DE 01NWP-003-REV-0

Approval Order Title and Reference Document:

Waste Treatment and Immobilization Plant  
Concrete Batch Plant Notice of Construction  
(24590-WTP-RPT-ENV-02-003)

**Revision:** Request for revision to the Findings section of the Waste Treatment and Immobilization Plant Concrete Batch Plant Approval Order to include operation of a diesel fuel oil boiler.

**Justification for Proposed Revision:**

*The Waste Treatment and Immobilization Plant Concrete Batch Plant Approval Order presently does not permit operation of a diesel fuel oil boiler. Operation of the boiler is necessary as a means to control concrete curing rates during the winter months by adding heated water to the concrete mixture.*

**Approval Order Revision:**

The following revision to the approval order is suggested.

Under first paragraph of the Findings, the following bullet is suggested to be added:

- A diesel fuel oil boiler will be located at the CBP to support concrete production activities during the winter months. The boiler will serve to produce heated water for use in the concrete mixtures as a means to control curing rates.

Reviewed by ORP:

Date: 11/12/02

Approved by Ecology:

Date: 3/12/03